

## CLAIMS

1. A computerized method for generating a visual template for a concept, comprising the steps of:
- a. obtaining at least one initial query for the concept;
  - 5 b. generating at least one additional query related to the initial query;
  - c. producing the additional query for inspection for appropriateness with respect to the concept; and
  - d. in case of appropriateness, including the additional query in the visual template for the concept.
- 10 2. The method of claim 1, wherein each query is represented by an icon/example image.
3. The method of claim 1, wherein the initial query is obtained via a sketchpad.
- 15 4. The method of claim 1, wherein generating the additional query comprises stepping a query feature with a step size which is inversely related to a weight associated with the query feature.
5. The method of claim 1, wherein generating the additional icon comprises forming a join of plausible feature values.
- 20 6. The method of claim 1, wherein appropriateness is ascertained by two-way user interaction.
7. A computerized method for querying a video database for a concept using a subset of a natural language in conjunction with semantic visual templates, comprising the steps of:
- a. obtaining a textual query;
  - 25 b. parsing the query to generate visual attributes;
  - c. using the visual attributes for forming a visual query;
  - d. using the visual query to retrieve information; and
  - e. displaying the information.
- 30 8. The method of claim 7, wherein the textual query is obtained from a keyboard.

9. The method of claim 7, wherein the subset of the natural language comprises a small set of nouns, verbs, prepositions, adjectives and adverbs.

10. The method of claim 7, further comprising a step of expanding the subset in an interactive fashion.

- 5           11. The method of claim 7, wherein parsing comprises the steps of:
- (i) establishing a correspondence between the query and the natural language subset;
  - (ii) labeling different parts of the query as a noun, verb, adjective or preposition; and
  - 10           (iii) obtaining clarification if a word in the query is absent from the natural language subset and labeling the word accordingly.

12. The method of claim 7, wherein forming the visual query comprises the step of establishing a correspondence between the natural language subset and a set of semantic visual templates generated by the method of claim 1, with the semantic
- 15           visual template being a visual embodiment of a noun in the query, an adjective serving to modify the visual embodiment of the nouns, a verb serving to embody an action, and a preposition serving to establish a spatial and temporal order needed in forming a visual query.

13. A computerized system for generating a visual template for a concept, comprising:
- a. means for obtaining at least one initial query for the concept;
  - b. means for generating at least one additional query related to the initial query;
  - c. means for producing the additional query for inspection for appropriateness with respect to the concept; and
  - d. means in case of appropriateness for including the additional query in the visual template for the concept.

14. The system of claim 1, wherein each query is represented by an icon/example image.

15. The system of claim 1, wherein the means for obtaining the initial query comprises a sketchpad.

16. The system of claim 1, wherein generating the additional query comprises stepping a query feature with a step size which is inversely related to a weight associated with the query feature.

17. The system of claim 1, wherein generating the additional icon comprises forming a join of plausible feature values.

18. The method of claim 1, wherein appropriateness is ascertained by two-way interaction between the system and a user.

19. A computerized system for querying a video database for a concept using a subset of a natural language in conjunction with semantic visual templates, comprising:

- a. means for obtaining a textual query;
- b. means for parsing the query to generate visual attributes;
- c. means for using the visual attributes for forming a visual query;
- d. means for using the visual query to retrieve information; and
- e. means for displaying the information.

20. The system of claim 19, wherein the means for obtaining the textual query comprises a keyboard.

21. The system of claim 19, wherein the subset of the natural language comprises a small set of nouns, verbs, prepositions, adjectives and adverbs.

22. The system of claim 19, further comprising means for expanding the subset in an interactive fashion.

23. The method of claim 19, wherein the means for parsing comprises:

- (i) means for establishing a correspondence between the query and the natural language subset;
- (ii) means for labeling different parts of the query as a noun, verb, adjective or preposition; and
- (iii) means for obtaining clarification if a word in the query is absent from the natural language subset and labeling the word accordingly.

24. The system of claim 19, wherein the means for forming the visual query

comprises means for establishing a correspondence between the natural language subset and a set of semantic visual templates generated by the system of claim 13, with the semantic visual template being a visual embodiment of a noun in the query, an adjective serving to modify the visual embodiment of the nouns, a verb serving to embody an action, and a preposition serving to establish a spatial and temporal order needed in forming a visual query.

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